

## **ABSTRACT**

### **SYSTEM AND APPARATUS FOR PREDICTING PLATE LAPPING PROPERTIES TO IMPROVE SLIDER FABRICATION YIELD**

**[0030]** A device for predicting the lapping property of a charged lapping plate uses samples with a known lap surface. The samples are lapped on the plate and a non-invasive sensor is used to determine the lapping rate under a fixed load and rotation speed. The total frictional force of the samples is measured during the lapping to calculate the friction and Preston coefficients of the plate. The samples are held in place while the plate rotates and the sensor measures the distance to the plate. The plate rotates for a specific time so that adequate removal of the pad material has occurred. The lapping rate is determined from a change in the gap distance over a time interval. The lapping rate and friction are then assessed to determine if the plate is lapping worthy.